

CLAIM LISTING

This listing of claims will replace all prior versions, and listings of claims in the application:

IN THE CLAIMS

1. (original) A method of measuring signal skew of a signal tree on a programmable logic device, the signal tree having a source node connected to first and second destination branches, a first plurality of programmable logic blocks programmably connectable to the first destination branch, and a second plurality of programmable logic blocks programmably connectable to the second destination branch, each of the logic blocks having an input terminal and an output terminal, the method comprising:
  - a. instantiating a first oscillator on the device using a first programming sequence that includes:
    - i. connecting the first destination branch to the input terminal of one of the first plurality of logic blocks;
    - ii. connecting the output terminal of the one of the first plurality of logic blocks to the input terminal of one of the second plurality of logic blocks; and
    - iii. connecting the output terminal of the one of the second plurality of logic blocks to the source node;
  - b. measuring the period the first oscillator; and
  - c. instantiating a second oscillator on the device using a second programming sequence that includes:
    - i. connecting the second destination branch to the input terminal of one of the second plurality of logic blocks;
    - ii. connecting the output terminal of the one of the second plurality of logic blocks to the input terminal of a second one of the second plurality of logic blocks; and

- iii. connecting the output terminal of the second one of the second plurality of logic blocks to the source node; and
  - d. measuring the period of the second oscillator.
2. (original) The method of claim 1, wherein the one of the second plurality of logic blocks in the first oscillator and the second one of the second plurality of logic block in the second oscillator are the same logic block.
3. (original) The method of claim 1, further comprising:
  - e. instantiating a third oscillator on the device using a third programming sequence that includes:
    - i. connecting the first destination branch to the input terminal of a first of the first plurality of logic blocks;
    - ii. connecting the output terminal of the first of the first plurality of logic blocks to the input terminal of a second of the first plurality of logic blocks; and
    - iii. connecting the output terminal of the second of the first plurality of logic blocks to the source node; and
  - f. measuring the period the third oscillator.
4. (currently amended) The method of claim 3, wherein the second of the first plurality of logic blocks is the one of the first plurality of logic blocks one of the second plurality of logic blocks of ~~paragraph (1)(a) claim 1, step a.~~
5. (original) The method of claim 4, further comprising:
  - g. instantiating a fourth oscillator on the device using a fourth programming sequence that includes:
    - i. connecting the second destination branch to the input terminal of one of the first plurality of logic blocks;

- ii. connecting the output terminal of the one of the second plurality of logic blocks to the input terminal of one of the first plurality of logic blocks;
    - iii. connecting the output terminal of the one of the first plurality of logic blocks to the source node;
  - h. measuring the period the fourth oscillator.
- 6. (currently amended) The method of claim 5, wherein the one of the first plurality of logic blocks is the same one of the first plurality of logic blocks of paragraph (1)(a) claim 1, step a.
- 7. (currently amended) The method of claim 6, wherein the one of the second plurality of logic blocks is the same one of second plurality of logic blocks of paragraph (1)(a) claim 1, step a.
- 8. (original) The method of claim 3, further comprising:
  - g. instantiating a fourth oscillator on the device using a fourth programming sequence that includes:
    - i. connecting the first destination branch to the input terminal of a third of the first plurality of logic blocks;
    - ii. connecting the output terminal of the third of the first plurality of logic blocks to the input terminal of the first the first plurality of logic blocks; and
    - iii. connecting the output terminal of the first of the first plurality of logic blocks to the source node.
- 9. (currently amended) A method of measuring determining signal skew of a signal tree on a programmable logic device, the signal tree having a source node connected to first and second destination branches, a first plurality of programmable logic blocks programmably connectable to the first destination

branch, and a second plurality of programmable logic blocks programmably connectable to the second destination branch, each of the logic blocks having an input terminal and an output terminal, the method comprising:

- a. instantiating a first oscillator on the device using a first programming sequence that includes:
  - i. connecting the first destination branch to the input terminal of a first of the first plurality of logic blocks;
  - ii. connecting the output terminal of the first logic block to the input terminal of a second one of the first plurality of logic blocks;
  - iii. connecting the output terminal of the second logic block to the source node; and
- b. instantiating a second oscillator on the device using a second programming sequence that includes:
  - i. connecting the first destination branch to the input terminal of the second logic block;
  - ii. connecting the output terminal of the second logic block to the input terminal of a first logic block;
  - iii. connecting the output terminal of the first logic block to the source node.

10–19. (canceled)